

# **TECHNICAL NOTES AND ACKNOWLEDGEMENTS**

## **Acknowledgements**

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## **Office of Women's Health**

Governor Pete Wilson established the California Office of Women's Health in August 1993 by Executive Order W-57-93. The legal mandate for the Office was enacted the following year (AB2200, Speier, Chapter 5900, Statutes of 1994). OWH serves as the focal point within the Department of Health Services to coordinate and develop policy, programs, partnerships, and research related to women's health in California. Specifically, the OWH is charged with: analysis and development of public health policy related to women's health; promoting more comprehensive and effective approaches to improve women's health, including better coordination of existing programs and resources; developing communication and coordination among the various (federal, state, local and private) agencies that target women's health issues and establishing mechanisms to monitor them.

This office dedicated its initial efforts to establishing internal and external partners and conducting an inventory of the resources in the Department of Health Services for addressing health needs of women in California. The Office has created a statewide Women's Health Advisory Council to provide a forum where representatives of a wide variety of private and public agencies can meet to discuss, review, and propose policy recommendations. The OWH has actively monitored and analyzed proposed legislation which is likely to impact women's health. An inventory of data sources and an inventory of DHS programs related to women's health issues were prepared by the Office for publication by DHS in the Fall of 1996.

## **Center for Health Statistics**

The Center for Health Statistics was organized in 1993 and is charged with the mission of monitoring the health status of Californians. Within the CHS, the Office of Health Information and Research (OHIR) is responsible for coordinating the development of health information systems and conducting research relating to the health status of California's population.

Within the Department of Health Services, responsibility for definition and maintenance of databases rests with the individual programs that collect the data. The various DHS data systems are not centralized within the CHS, except the vital statistics records (birth and death data).

Research reports that require the use of more than the vital statistics database, such as this report on women's health, are usually prepared as a collaborative effort.

## **Data Sources**

The principal data sources used in preparation of this report included the following:

**Population and Demographic Data.** Population estimates for census years and non-census years were obtained from the California Department of Finance. The detailed demographic data for 1990 was obtained from the 1990 California Public Use Microdata Sample (5% sample), purchased from the US Department of Commerce, Bureau of the Census.

**Births and Deaths.** The California Department of Health Services, Center for Health Statistics, Office of Vital Records, was the source for the birth and death data that appear in this report. These data were tabulated from the Birth and Death Statistical Master Files for the years 1985 through 1994.

**Causes of Death/Hospitalizations.** The California Office of Statewide Health Planning and Development (OSHPD) was the source for the hospitalization data used in this report. OSHPD collects data on all hospitalizations from acute care hospitals throughout the state. The data presented in this report are based on numbers of discharges from these hospitals and not on number of patients. Numbers shown in the report can represent multiple visits for the same patient. Birth data from this file include only births from acute care hospitals and do not include home births and births from birthing centers.

**Tuberculosis.** The tuberculosis data were provided by the Tuberculosis Control Branch of the California Department of Health Services. This Branch maintains the statewide surveillance system for tuberculosis cases reported by medical care providers in California.

**Sexually Transmitted Diseases.** The sexually transmitted disease data were provided by the STD Control Branch of the California Department of Health Services. This Branch maintains the statewide surveillance system for sexually transmitted diseases reported by medical care providers and laboratories in California.

**Acquired Immune Deficiency Syndrome (AIDS).** The AIDS incidence data were provided by the Office of AIDS of the California Department of Health Services. This Office maintains the statewide registry of AIDS cases reported in California.

**Behavioral Risk Factor Survey.** The data reported in Chapter 7 were obtained from the Behavioral Risk Factor Survey System (BRFSS) for the years 1984 through 1994. The BRFSS is a telephone survey of adults aged 18 and over, using a random digit dialing sampling method. It is conducted by the Department of Health Services in cooperation with the Centers for Disease Control and Prevention. Answers to the interview questions provide data on risk factors that can impair health, such as smoking prevalence, drinking patterns, obesity and hypertension. For this report, data were grouped across several years to provide a larger base for calculating percentages. The actual sample sizes are given in Table 1.

Within telephone area code clusters, the BRFSS utilizes a stratified random sampling strategy with over-sampling of smaller age and race/ethnic groups. In analysis, the data were weighted to provide meaningful population estimates. The weights standardized the estimates to the 1990 California population, yielding the distributions shown in Table 2 below:

Race/ethnicity was defined by the following groups: whites, African Americans, Hispanics, Asian/Pacific Islanders, Native Americans (including Aleutian, Eskimo, American Indian), and Others. The number of Native American and Other respondents in each of the combined samples was relatively small. As a result, percentages that were calculated for members of these two groups should be interpreted with caution.

The content of the questionnaire that was used in the phone interview was changed slightly from year to year. As a result, data related to some of these risk factors are available for some, but not all, years.

Eleven risk factors were selected for use in this report. The definitions of these variables and the years for which data are available are as follows:

**Smoking** (available for 1984-94): Respondent is currently a smoker, regular or irregular.

**Alcohol abuse: binge** (1984-92): Respondent reported having five or more drinks on at least one occasion during the past month.

**Alcohol abuse: chronic** (1984-92): Respondent reported having sixty or more drinks during the past month.

**Failure to use seat belts** (1984-92): Respondent wears seat belt sometimes, seldom, or never.

**Obesity** (1984-94): Respondent has Body Mass Index (kg/m<sup>2</sup>) of at least 27.3 (females) or 27.8 (males).

**Hypertension** (1984-94): Respondent has ever been told by a physician, nurse, or other health professional that he/she has high blood pressure.

**Lack of exercise** (1984-94): Respondent does not participate in any physical activity.

**Arthritis** (1984-91): Respondent ever had arthritis.

**Failure to have a mammogram** (1988-94): Respondent never had a mammogram.

**Failure to have a Pap Test** (1990-94): Respondent never had a Pap Test.

**Lack of health insurance** (1989-94): Respondent does not report having any health care insurance coverage, including public sector programs.

We were unable to identify statewide data resources for domestic violence and mental illness. Thus, even though these are important issues for women, they are not included in this report.

## **Race/Ethnic Coding**

The categories for race/ethnicity in this report may differ from one data source to another. Data from the vital statistics database are self reported on the birth certificate but are provided by next of kin, coroner or funeral director on the death certificate. Hispanic classification on both birth and death certificates are obtained by asking two questions: first, for race category, and second for whether or not the respondent is of Hispanic origin. In retrieving data from these databases, the Center for Health Statistics uses the Hispanic origin question if answered affirmatively to classify Hispanics. Therefore, Hispanics can be of any race group. The classifications used in this report are mutually exclusive categories. For data from the death certificate, four major categories are available: white, Hispanic, African American and Asian/Other.

The calculation of rates, such as death rates, requires use of population data in the denominator. Consequently, the race/ethnic categories available in the population data limit the classifications that can be used for calculation of rates. The CHS obtains population data from the Department of Finance, which only produces populations estimates for the four main groups, except in a Census year. The mortality rates reported in this report are stratified by the four major race/groups only: white, African American, Hispanic, and Asian/Other.

The calculation of percentages (e.g., the percent of newborns with weight under 2,500 Kg), does not require population estimates and can make use of the full race/ethnicity detail available in the data. In this report we made use of the detailed race/ethnicity information reported in the birth files and reported percentages stratified by the following major and sub-population groups: white, African American, Native American (comprised of American Indian, Eskimo and Aleut), Hispanic (comprised of Mexican, Cuban, Puerto Rican and Other Hispanic), Asian (comprised of Chinese, Japanese, Korean, Vietnamese, Cambodian, Thai, Laotian, Filipino, Asian Indian and Other Asian) and Pacific Islander (comprised of Hawaiian, Guamanian, Samoan and Other Islander).

In reporting hospitalization data from the Office of Statewide Health Planning and Development's Hospital Patient Discharge Files, we did not attempt to calculate population rates because individual persons may have multiple records. In reporting total numbers of hospitalizations we were able to make use of all the race/ethnic detail available in the data using the following categories: white, African American, Hispanic, Native American (comprised of American Indian, Eskimo and Aleut), Asian/Pacific Islander and Other Race. The race/ethnic data in this data file are based on self-report, in response to a single question.

### **Diagnostic Coding for Hospitalizations and Deaths**

Data for mortality are based on diagnostic codes from the International Classification of Diseases, Ninth Revision (ICD-9). For each cause of death shown in the tables in this report, the corresponding codes from this reference are shown. To be consistent, the hospitalization data were also reported using the ICD-9 codes, rather than the Diagnostic Related Group Codes.

### **Age-Adjusted Death Rates**

The death rates in this report were age-adjusted using the direct method. The 1940 US population was used as the standard for age-adjusting the death rates. The basic assumption of direct age adjustment of rates is that to make valid comparisons of death rates among race/ethnic groups, differences in the age composition of race/ethnic groups must be controlled. The age

composition of a population is the primary determinant of the risk of dying (20).

If each race group in 1994 is distributed by age just as the total US population was in 1940 (when the population had relatively fewer old people) then, in a sense, these artificial rates put the race/ethnic groups on an equal footing with respect to age composition and the effects of age upon the risk of dying. It is obvious that "all other things being equal", a group made up of younger people is not as likely to have as many deaths during a given time period as a group made up of older people. Thus, age adjusting eliminates the effect of differences in the distribution of age among race groups, making any remaining differences in death rates explainable by other factors.

See Appendix E for a description of the direct method used to age adjust the death rates shown in this report.